

University of Groningen

Health Information-Seeking Behavior of Seniors Who Use the Internet

Medlock, Stephanie; Eslami, Saeid; Askari, Marjan; Arts, Derk L.; Sent, Danielle; de Rooij, Sophia E.; Abu-Hanna, Ameen

Published in:
Journal of Medical Internet Research

DOI:
[10.2196/jmir.3749](https://doi.org/10.2196/jmir.3749)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2015

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Medlock, S., Eslami, S., Askari, M., Arts, D. L., Sent, D., de Rooij, S. E., & Abu-Hanna, A. (2015). Health Information-Seeking Behavior of Seniors Who Use the Internet: A Survey. *Journal of Medical Internet Research*, 17(1), [10]. <https://doi.org/10.2196/jmir.3749>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

As a patient you can choose the care that best fits your personal situation, but only if you have the right information to make a good decision. The purpose of this survey is to learn how seniors and their caregivers stay informed about their health – both general health information (such as tips for staying healthy), and how you look for answers to specific questions or information about health problems. Then we will know how to best reach you and other seniors with important information about health.

Section 1: demographics and general health

Your information is analyzed anonymously and cannot be used to identify individuals.

Year of birth	_____
Gender	M F
Postcode (numbers only)	_____
Highest education level	primary school high school vocational/housekeeping associate's degree bachelor university/master
Country of birth	_____
Marital status	married divorced widowed cohabitating single
Housing status	cohabitating (partner friend family) living alone nursing home
^D Are you the primary caretaker for someone with a serious or chronic health condition?	yes no
^I In general, how is your health?	very good good fair bad very bad
^E I can make an appointment for routine care (e.g. with my primary care doctor) as soon as I want	strongly agree agree disagree strongly disagree
^E Rating of all health care received in the last 12 months:	
1.....2.....3.....4.....5.....5.....6.....7.....8.....10	
unacceptable.....average.....outstanding	

Section 2: API

The questions for the Autonomy Preference Index were drawn from Simon et al.^J, which were in turn based on Ende et al.^K

Section 3: Sources of health information

Health information is information about preventative care (such as vaccinations or good nutrition), specific conditions (such as diabetes or cancer), and medications or other forms of treatment. This section is about the ways you stay informed about your health.

^D How much of your health information do you get from each of the following sources:

^{D,I} direct contact with a health professional	a lot some a little none
^{D,I} pharmacy	a lot some a little none
^C leaflets at the doctor's office (such as in the waiting room)	a lot some a little none
^C telephone help line	a lot some a little none
^{D,I} television	a lot some a little none
^{D,I} radio	a lot some a little none
^I newspapers	a lot some a little none
^B magazines specifically about health	a lot some a little none
^{D,I} other magazines	a lot some a little none
^{D,I} friends /family	a lot some a little none
^N church/religious group	a lot some a little none
^I courses and lectures	a lot some a little none
^{D,I} internet	a lot some a little none
^H self-help/patient groups	a lot some a little none
^{D,I} books/encyclopedias	a lot some a little none

^N	the library	a lot some a little none
^N	other/comments	

^D Please indicate how much you *trust* health information from each of the following sources¹:

^{D,I}	direct contact with a health professional	a lot some a little none
^{D,I}	pharmacy	a lot some a little none
^C	leaflets at the doctor's office (such as in the waiting room)	a lot some a little none
^C	telephone help line	a lot some a little none
^{D,I}	television	a lot some a little none
^{D,I}	radio	a lot some a little none
^I	newspapers	a lot some a little none
^B	magazines specifically about health	a lot some a little none
^{D,I}	other magazines	a lot some a little none
^{D,I}	friends /family	a lot some a little none
^N	church/religious group	a lot some a little none
^I	courses and lectures	a lot some a little none
^{D,I}	internet	a lot some a little none
^H	self-help/patient groups	a lot some a little none
^{D,I}	books/encyclopedias	a lot some a little none
^N	the library	a lot some a little none
^N	other/comments	

Section 4: Searching for health information

People often have questions about health. This section is about searching for information beyond what your doctor provides to you. You may have asked a health professional for more information, or asked someone other than a doctor (such as family, friends, classes, or a patient support group). You may have searched on the internet, or looked for written information (such as in magazines or at the library). Please tell us if you have *sought* additional information, even if you didn't find what you were looking for. Check all that apply.

^D In the last 12 months, I have sought health information:

^{H,I}	to decide whether I need to see a doctor	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^{H,I}	to prepare for an appointment	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^{H,I}	to look up information after an appointment	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]

^D I have sought health information about:

^{D,I}	specific symptoms, to find out what might be causing them	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^G	prognosis	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^G	treatment options	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^D	prescription drugs	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^G	side effects of treatment or medication	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^G	coping with a disease	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]

¹ Respondents commented that the phrasing of this question did not distinguish between "I don't use this source because I don't trust it" and "I don't know if I trust this source, because I don't use it." The authors suggest adding a "not applicable" option to these questions.

	people on the internet written materials]
^A practical care information (e.g. bathing, first aid, etc.)	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^{B,D} nutrition/physical exercise	no yes [If yes, how?: asked a health professional asked other people on the internet written materials]
^N If I have a need for information, I prefer to (please choose 1 option):	I don't search for health-related information Ask a health professional Search on the internet Search using sources other than the internet (magazines, friends, etc.)
^F I often want more health information but don't know where to find it	strongly agree agree disagree strongly disagree
^C I expect my doctor/health professionals to provide me with all of the information that I need.	strongly agree agree disagree strongly disagree
^E I have had difficulty finding health information in my primary language	never once sometimes often

Section 5: Consequences of health information seeking (Results previously published in [L])

^I Has the health-related information you found led to:

^D deciding <i>to see</i> a doctor	never once sometimes often
^H deciding <i>not to see</i> a doctor	never once sometimes often
^D a conversation with a doctor about what I found	never once sometimes often
^{H,I} willingness to change diet/lifestyle habits	never once sometimes often
^{H,I} change of medicine without consulting a health professional	never once sometimes often
^{H,I} feelings of anxiety	never once sometimes often
^{H,I} feelings of reassurance or relief	never once sometimes often
^{H,I} suggestions/queries about a diagnosis	never once sometimes often
^H suggestions/queries about a treatment	never once sometimes often
^E more knowledge and understanding of a specific condition, disease or treatment	never once sometimes often
^N feeling more confused about a specific condition, disease, or treatment	never once sometimes often

other/comment _____

[] Someone helped me with filling in this questionnaire

References

- A. Kernisan LP1, Sudore RL, Knight SJ. Information-seeking at a caregiving website: a qualitative analysis. J Med Internet Res. 2010 Jul 28;12(3):e31. doi: 10.2196/jmir.1548.
- B. Taha J, Sharit J, Czaja S. Use of and satisfaction with sources of health information among older Internet users and nonusers. Gerontologist 2009; 49(5): 663-73.

- C. Rokade A, Kapoor PK, Rao S, Rokade V, Reddy KT, Kumar BN. Has the internet overtaken other traditional sources of health information? Questionnaire survey of patients attending ENT outpatient clinics. *Clin Otolaryngol Allied Sci.* 2002 Dec;27(6):526-8.
- D. Rideout VJ, Neuman T, Kitchman M, Brodie M, The Kaiser Foundation. E-health and the elderly: How seniors use the internet for health in-formation: Key findings from a national survey of older Americans. 2005
D1. modified from (D)
- E. Zhang, Y, Jones B, Spalding M, Young R, Ragain M. Use of the internet for health information among primary care patients in rural West Texas. *South Med J*, 2009. 102(6): p. 595-601.
Questions in this study were derived from Baker L, Wagner TH, Singer S, et al. Use of the Internet and e-mail for health care information: results from a national survey. *JAMA* 2003;289:2400 –2406.
- F. Ybarra, ML, Suman M. Help seeking behavior and the Internet: a national survey. *Int J Med Inform*, 2006. 75(1): p. 29-41.
- G. Castleton K, Fong T, Wang-Gillam A, Waqar MA, Jeffe DB, Kehlenbrink L, Gao F, Govindan R. A survey of Internet utilization among patients with cancer. *Support Care Cancer*. 2011 Aug;19(8):1183-90. doi: 10.1007/s00520-010-0935-5.
- H. Dumitru RC, Bürkle T, Potapov S, Lausen B, Wiese B, Prokosch HU. Use and perception of internet for health related purposes in Germany: results of a national survey. *Int J Public Health*, 2007. 52(5): p. 275-85.
- I. Andreassen HK1, Bujnowska-Fedak MM, Chronaki CE, Dumitru RC, Pudule I, Santana S, Voss H, Wynn R. J. European citizens' use of E-health services: a study of seven countries. *BMC Public Health*. 2007 Apr 10;7:53.
- J. Simon D1, Kriston L, Loh A, Spies C, Scheibler F, Wills C, Härter M. Confirmatory factor analysis and recommendations for improvement of the Autonomy-Preference-Index (API). *Health Expect*. 2010 Sep;13(3):234-43. doi: 10.1111/j.1369-7625.2009.00584.x.
- K. Ende J1, Kazis L, Ash A, Moskowitz MA. Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. *J Gen Intern Med*. 1989 Jan-Feb;4(1):23-30.
- L. Medlock S, Eslami S, Askari M, Sent D, de Rooij SE, Abu-Hanna A. The consequences of seniors seeking health information using the internet and other sources. *Stud Health Technol Inform*. 2013;192:457-60.
- N. new